

SUBDIVISION PLAN CHECKLIST

Development: _____ Site Address: _____

Engineer's Name: _____ Date: _____

General Plan Requirements

- ☐ Eight sets of plans shall be submitted
- ☐ Plans should be in AutoCAD format
- ☐ Minimum sheet size shall be 24" x 36" unless otherwise approved prior to submission
- ☐ Set shall be comprised of separate sheets as listed below unless otherwise approved by the Site Plan Review Committee at the pre-application scoping session
- ☐ All plans shall be stamped by Commonwealth of Massachusetts-registered Professional Engineer, Professional Land Surveyor, and/or Professional Landscape Architect
- ☐ All plans oriented so that north arrow points to top of sheet
- ☐ All plans shall be shown at 1" = 40' or less and shall show a graphical scale
- ☐ All plans shall have a title block comprised of the following:
 - ☐ Project Title
 - ☐ Sheet Title
 - ☐ Sheet Number
 - ☐ Registrant Stamp (PE, PLS, LA)
 - ☐ Engineers name, address, fax and telephone number
 - ☐ Scale
 - ☐ Plan Issue Date
 - ☐ Plan Revision Date(s)
- ☐ Traffic Impact and Access Study (TIAS) to be submitted with application
- ☐ Storm Water Management Report to be submitted with application
- ☐ Sewer Connection/Extension Permitting (if required)
 - ☐ MEPA waiver West Plant (if required)

Cover Sheet

- ☐ Title Block
- ☐ Project name / title
- ☐ Street number and/or lot number (for new buildings, engineering will assign a street number prior to approval)
- ☐ Assessor's map and parcel number(s)
- ☐ Name and address of property owner
- ☐ Name, address, telephone and fax number of engineer
- ☐ Name, address, telephone and fax number of the developer
- ☐ Revision Date Block
- ☐ Zoning District
- ☐ Zoning Requirements Table-"Required vs. Provided"
 - ☐ Lot Size
 - ☐ Lot Frontage
 - ☐ Side Yard Setback
 - ☐ Front Yard Setback
 - ☐ Rear Yard Setback
 - ☐ Building Height
 - ☐ Lot Coverage
 - ☐ Distance from Residential District
 - ☐ Parking Spaces
 - ☐ Compact Parking Spaces
 - ☐ Handicap Parking Spaces
 - ☐ Parking Lot Setback
 - ☐ Parking Lot Perimeter Planting
 - ☐ Parking Lot Interior Planting
 - ☐ Landscaping Requirements
- ☐ Locus Map (Show all roads and available building information within 1000 feet)
- ☐ Site Plan Review Committee signature block (7 lines)

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- ☐ Plan Index with latest revision date of each plan

Existing Conditions Plan

- ☐ Name of Surveyor
- ☐ Date of survey
- ☐ Property lines with bearings and distances
- ☐ Monuments
- ☐ Easements with bearings and distances
- ☐ Name of all abutters
- ☐ Street names
- ☐ Plan survey datum shall be the National Geodetic Vertical Datum of 1929 (NGVD 1929) and this reference shall be shown on the plans.
- ☐ Benchmark locations minimum of two within 200 feet of the site shown on the plans.
- ☐ Existing Buildings and Structures
 - ☐ Area of building
 - ☐ Number of stories
 - ☐ Principal use
 - ☐ Setbacks from property lines
 - ☐ Floor elevations
 - ☐ Door locations with sill elevations
- ☐ Existing Topography:
 - ☐ Contours at 2' intervals (1' contours or additional spot grades if site is flat)
 - ☐ Overhead and underground utilities including but not limited to water, sewer, drainage, electric, telephone, cable TV, gas, septic systems, detention structures, wells
 - ☐ Existing parking/paved areas including pavement type (parking, walkways, etc.)
 - ☐ Adequate utility information outside the site to verify proposed utility connections
 - ☐ All utility pipe types, sizes, lengths, and slopes
 - ☐ All utility structure information including rim and invert elevations
 - ☐ All existing easements within 50 feet of property line-Identify any utility within the easement
 - ☐ All existing utility easements with bearings and distances
 - ☐ Existing pavement markings within site and on connecting roads
 - ☐ Existing features such as walls, curbing, landscaping, trees, walks, fences, trees over 12" caliper, lighting, signs, loading areas, dumpster locations, etc...
- ☐ Wetlands, floodplain, water protection district delineation including offsets and buffer zones
- ☐ Test pit locations including groundwater depths
- ☐ Historic buildings within 250 feet

Construction/Layout Plan (show appropriate information from Existing Conditions Plan)

- ☐ Proposed Buildings and Structures
 - ☐ Area of building or additions
 - ☐ Number of stories
 - ☐ Principal use
 - ☐ Floor elevations
 - ☐ Door locations with sill elevations
 - ☐ Setback dimensions from property lines
- ☐ Proposed Topography including but not limited to:
 - ☐ Proposed contours at 2' intervals
 - ☐ Parking lot setbacks to property line
 - ☐ Parking lot grades shall not exceed 5% or be less than 0.5%
 - ☐ Parking spaces (delineated and dimensioned)
 - ☐ Handicap parking
 - ☐ Handicap access
 - ☐ Wheelchair ramps
 - ☐ Sidewalks
 - ☐ Pavement type(s)
 - ☐ Curb type(s) and limits

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- ☐ Granite curb at entrance to layout line
- ☐ Lighting
- ☐ Signs (include sign schedule)
- ☐ Pavement markings
- ☐ Loading areas
- ☐ Walls
- ☐ Fences
- ☐ Landscape areas
- ☐ Dumpster(s)
- ☐ Critical dimensions including aisle widths, parking stall dimensions, curb radius etc...
- ☐ Grading at entrance-show spot grades if required
- ☐ Emergency Vehicle Access
- ☐ Truck Access (WB-50 unless otherwise approved by City Engineer)
- ☐ Snow Storage Area
- ☐ Refer to Street Opening Permit
- ☐ Show limit of work within City right-of-way-sawcut
- ☐ Construction notes including the following notes:
 - ☐ Any minor modifications (as determined by the City Engineer) to the information shown on the approved site plans shall be submitted to the City Engineer as a Minor Plan Revision for approval prior to the work being performed.
 - ☐ Any work and material within the City right-of-way shall conform to the City of Marlborough requirements
 - ☐ All handicap parking, ramps, and access shall conform to AAB requirements
 - ☐ All erosion control measures shall be in place prior to construction. Erosion Control shall conform to the City of Marlborough Conservation Commission requirements as stated in the Order of Conditions. (refer to Erosion Control Plan if part of submission)
 - ☐ All pavement markings and signs shall conform to MUTCD requirements

Utility and Grading Plan (show appropriate info. from Existing Conditions and Construction Plan)

- ☐ All proposed utilities including but not limited to Water, Sewer, Drainage, Electric, Telephone, Cable TV, Gas, Lighting, Septic Systems, Detention Structures
 - ☐ Adequate utility information outside the site to verify proposed utility connections
 - ☐ All utility pipe types, sizes, lengths, and slopes
 - ☐ All utility structure information including rim and invert elevations
 - ☐ All water services, hydrants, gates, shutoffs, tees
 - ☐ Utilities shall be underground if possible
 - ☐ All transformer locations
 - ☐ Required utility easements with bearings and distances
 - ☐ Minimize utility crossings (show locations of crossings and verify clearance)
 - ☐ 5' horizontal separation between all utilities (10' between water and sewer)
- ☐ See Recommended Force Main Requirements if force main is proposed
- ☐ Sewer Connection/Extension Permitting (if any of the following apply)
 - ☐ Proposed site generates industrial waste
 - ☐ Proposed flows exceed 15,000 gallons/day
 - ☐ Pump Station
 - ☐ Extension of sewer main
- ☐ Sewer system
 - ☐ Show and label service connections for each building.
 - ☐ Services shall be min. 6" diameter.
 - ☐ Minimum pipe slope shall be 1%.
 - ☐ Maximum pipe slope shall be 9%.
- ☐ Water main loop for large site (as determined by Site Plan Review Committee)
- ☐ Water system
 - ☐ Show and label service connections for each building.
 - ☐ Services shall be copper and ¾ inch diameter size min.
 - ☐ Show all intersections gated three ways.
 - ☐ Hydrants with anchor tee and gates located every 500' min.
 - ☐ Show all mainline gates every 1000' min.

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- ☐ Fire protection sized for use-Provide calculations if required
- ☐ Foundation Drain (if used)
 - ☐ Minimum drain size shall be 6" diameter with a backflow
 - ☐ Show overflow outfall
 - ☐ Preferred discharge is to an infiltration system.
 - ☐ Discharge to detention basin or other outfall shall be above the 100 year storm event elevation.
- ☐ Provide stationing for all roadways and sewer or drain cross country runs (typ.)
- ☐ Provide profile for all roadways and sewer or drain cross country runs (typ.)
- ☐ Sections through detention basin(s)
- ☐ Include the following notes:
 - ☐ The contractor shall obtain a Street Opening Permit prior to any construction within the City right-of-way
 - ☐ All water and sewer material and construction shall conform to the City of Marlborough requirements (see Street Opening Permit)
 - ☐ All water and sewer construction shall be inspected by the City Of Marlborough before being backfilled
 - ☐ The City shall be notified at least 24 hours prior to the required inspections
- ☐ See Drainage Report Checklist for drainage and detention basin requirements

Landscape Plan (show appropriate information from Existing Conditions and Construction Plan)

- ☐ Proposed landscaping per Buffer and Parking Lot Planting Zoning Requirements
- ☐ Plant and tree legend
- ☐ Indicate areas to be loamed and seeded
- ☐ Proposed irrigation (on-site wells to be used unless otherwise approved)
- ☐ Verify sight distances at entrances

Erosion Control Plan (show appropriate information from Existing Conditions and Construction Plan)

- ☐ Haybales or haybale/silt fence combination
- ☐ Anti-tracking area at all construction entrances
- ☐ Protect existing and proposed drainage structures with haybales and or silt sacks
- ☐ Include the following notes:
 - ☐ All erosion control measures shall be in place prior to construction. Erosion Control shall conform to the City of Marlborough Conservation Commission requirements as stated in the Order of Conditions.
- ☐ Delineate all stockpile areas
- ☐ Provide safety fencing around stockpiles over 10' in height or otherwise restrict site access

Detail Sheets (typical details)

- ☐ Pavement Section Detail
- ☐ Sidewalk Detail
- ☐ Curb Detail
- ☐ Driveway Detail
- ☐ Wheel Chair Ramp Detail
- ☐ Concrete Pad Detail
- ☐ Silt Sack Detail
- ☐ Catch Basin Detail*
- ☐ Drainage Manhole with Stair Detail*
- ☐ Culvert section Detail
- ☐ Drain Trench Detail (12" 1/2" minus gravel backfill envelope-5 feet cover min.)
- ☐ Water Trench Details (12" sand envelope – 5 feet cover min.)
- ☐ Sewer Trench Details (12" 3/4 - inch stone envelope)
- ☐ Sewer Manhole Detail (26" cover)
- ☐ 5' inside Diameter Sewer Manhole with stairs Detail*
- ☐ Detention Basin Sections (show section on plan-See also Drainage Report Checklist)
 - ☐ Note provided "To be designed and inspected by a Licensed Professional Geotechnical Engineer and stamped certification of proper design and inspection shall be provided to the City Engineer after installation and prior to as-builts being approved".
 - ☐ Show Fence with access gate (Outside 10' level area) around detention basin (typ.)
 - ☐ Show 10 foot wide level access around entire basin for maintenance

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- ☐ Provide groundwater elevations
- ☐ Show providing for 1 foot of freeboard.
- ☐ Provide concrete anti-seepage collar in basin berm around discharge pipe
- ☐ Impervious core material keyed into existing subgrade within berm
- ☐ 3:1 basin side slopes
- ☐ Detention basin sections from inlet to outlet showing all storm event elevations
- ☐ Emergency overflow spillway made of rip rap
- ☐ Basin inlet shall have flared end with rip rap apron
- ☐ Outfall Structure Detail
 - ☐ All outfall elevations
 - ☐ Show a low flow discharge and grated top
 - ☐ Provide a trash rack in front of inlet
 - ☐ Discharge shall have flared end with rip rap apron
- ☐ Miscellaneous Detention Basin Details
- ☐ Flared End Detail
- ☐ Rip Rap Detail
- ☐ Haybale/Silt Fence Detail
- ☐ Light Pole Foundation Detail
- ☐ Retaining Wall Details
 - ☐ Note: walls over 4' in height shall be designed and inspected by licensed structural engineer and stamped certification of proper design and inspection shall be provided to the City Engineer after installation and prior to as-builts being approved.
- ☐ Tree/Shrub Planting Detail
- ☐ Sign Detail
- ☐ Fence Detail
- ☐ Flowable Fill Trench
- ☐ Pavement Marking Details
- ☐ Handicap Parking/Compact Parking Signs
- ☐ Water service (note: Curb stops open right w/drip).
- ☐ Utility Crossing detail.
- ☐ Hydrant Detail anchor tee with gate (Mueller-open right)
- ☐ Tapping Sleeve and gate (open right)
- ☐ Thrust Block Detail
- ☐ Light Pole Foundation Detail

*All structures shall be raised min 2 course max. using red clay brick and sealed mortar (typ.)